ABSTRACT

An amplifier including an amplifier transistor that operates in an active region has main current flowing therethrough according to input voltage, and a linear transistor that is driven by offset positive-polarity input voltage to operate in a linear region and has auxiliary current flowing therethrough. The main current and auxiliary current are added to become output current. The offset positive-polarity voltage corresponds to the sum of AC component of the input voltage and an offset DC voltage. Here, a transistor stacked on the linear transistor is coupled to the amplifier transistor to secure the linear region operation of the linear transistor. The stacked transistor is driven by a voltage having polarity opposite to that of the input voltage.